CSEN 60 Fall 2024 Project Description

Objective: Replicate 2-4 pages of a popular website.

Website Categories & Requirements:

- Social media
  - Sample websites
    - Reddit
    - Twitter
    - Instagram
    - Facebook
    - LinkedIn
    - Youtube
  - Pages
    - Feed page
    - post page
    - profile page
  - Functionality:
    - posts must be fetched from an api
    - Must include a scrollable feed
- News
  - Sample websites
    - https://www.theverge.com/
    - Yahoo
    - https://www.nbcnews.com/
  - Pages
    - Home
    - Article
    - Login
  - Functionality:
    - Recommendations at the bottom (simulated)
- Ecommerce
  - Sample websites
    - https://www.etsy.com/
    - www.amazon.com
    - Best buy
  - Pages
    - Home page (Simplified)

        - Search results
        - Product view
        - Cart view
    - Functionality:
        - Add to cart
- Other
    - If there's a website you want to replicate that isn't on this list, provide the name, link, 2-3 pages you'd be implementing, and the functionality in your proposal.

Backend

In order to serve dynamic content to the website, you'll be building a simple backend api that will fetch from a database. I'll be showing in class how to do this around Week 8, so don't worry about doing this on your own.

Groups

You can work individually or in groups of 2-4 people. Each person will need to build at least one page. The # of pages will be **dependent on the specific website** you'll choose. I'll work one-on-one with your group to determine # of pages after you submit your proposal. Here is a general guideline of what to expect:

- 1 person: 2 pages
- 2 people: 2 pages
- 3 people: 3 pages
- 4 people: 3-4 pages

Note: Each group must choose a unique website! Selection will be based on who submits their proposal the earliest.

Github Repository

You'll be developing your project with your team on a shared Github repository. I will be providing instructions on how to use branching for new features, pull requests, code reviews, and merging.

Advanced Topics

You may use advanced web development technologies if you are familiar with them and your teammates are comfortable learning them. Examples include:

- TailwindCSS or styled components for styling

- React, Svelte, Angular, or Vue for client-side JS frameworks
- Next.js, Remix, Astro, or Gatsby for full-stack JS frameworks

Hosting

For ease of demonstration, the instructor will provide instructions on how to host your website on a hosting platform like Vercel, Railway, or Render.

Final Presentation

Week 10 or Finals week will be when you present your project to the class. Requirements are:

- Slide deck with a slide for each bullet point:
    - Your chosen website (show
    - The web technologies used
    - How you split the work (pages/functionality)
    - Live Demo (record a loom backup)
    - Best practices you incorporated
    - Challenges you faced and how you solved them.
- Live Demo
    - Show off functionality

Timeline

Each week there will be a checkpoint that you'll complete. This may be a submission and or a short meeting in class (usually Friday). Here are the planned checkpoints:

- Week 4
    - One person from each group will submit a proposal that specifies
        - The names of all your group members
        - Your top 3 websites. Specify which pages and what functionality you'll be developing.
        - What web technologies you plan to be using.
- Week 5
    - Everyone should have assigned themselves the page they'll be working on to design and build the frontend with html/css
    - Should have completed the box method to decide how the html will be made.
- Week 6
    - Should be in the middle of styling
- Week 7
    - Instructor gives feedback on everyone's site (will be in class and probably take the whole class period)

    - Styling should be almost complete
    - JS functionality should be starting now (any frontend dynamic stuff)
- Week 8
    - Backend should be getting built
    - Using sqlite db to store your data that you'll fetch on page load
- Week 9
    - Feedback from instructor
- Week 10
    - Presentations in class + demo

Note: Timeline and project requirements are subject to change.